



**MASTER PATIENT INDEX
(MPI) *VISTA*
HL7 INTERFACE SPECIFICATIONS**

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Introduction

This interface specification is intended to identify the **VISTA** information that will be shared as part of the CIRN/Master Patient Index (MPI) project. The sharing of this information will be triggered by specific **VISTA** events. Both the exact events and the messages used to share this data will be reviewed.

The MPI application will make use of and create messages using the abstract message approach and encoding rules specified by the HL7 standard. The HL7 **VISTA** application will be used for communicating data associated with various events that occur in health care environments.

The formats of these messages conform to the HL7 interface standards, Version 2.3. HL7 custom message formats ("Z" segments) are used only when necessary.

Assumptions

This interface document assumes that communication between the systems is established and maintained by **VISTA**/Kernel processes. The discussion of specific technical issues related to this aspect of communication is beyond the scope of this document. This document also assumes a communication server utilizing **VISTA** HL7 version 1.6 or a similar compatible message communicator. **VISTA** Kernel, MailMan, VA FileMan, and HL7 package are assumed the most recent versions and fully patched.

Message Content

The data sent in the HL7 messages will only be limited by the data available in **VISTA**. The messages used will be generic enough so that any application or external system should be able to find all the information that is relative to the event that triggered it.

Several different HL7 messages are available. MPI **VISTA** takes advantage of **VISTA** events and has added some new events to support the MPI.

Data Capture and Transmission

When a PIMS, CIRN, or MPI option, call, or API is used to update a specific patient's information in **VISTA**, an HL7 message is triggered to broadcast the event. Any changes made to patient information in nonstandard ways, such as direct global sets by an application or by MUMPS (M) code will not trigger a broadcast message.

Background Messages

Updates to specific patient demographic data will trigger the broadcasting of a HL7 ADT-A08 message. Because there is no set way of identifying when an edit to patient information is complete, these edit

events are marked as needing to be transmitted in the ADT/HL7 Pivot file. A background job (scheduled TaskMan job) periodically broadcasts the HL7 ADT-A08 message, containing any changes to data.

Updates to a patient's treating facility list function in a similar manner. When the update to a patient's treating facility occurs this event is added to the ADT/HL7 Pivot file and marked for transmission. A background job will collect these updates and broadcast the HL7 MFN messages.

Background processes are also used during the initialization phase of the MPI. Specifically a background process creates batch messages of patients requesting assignment of ICNs by the MPI. These patients have been assigned a CMOR Activity Score during the Pre-Implementation phase of CIRN/MPI.

Following the initialization process, a batch CMOR comparison background job is started. This job sends HL7 batch messages comprised of non-CMOR (requesting site) patient entries (100 maximum per HL7 batch message) to determine, based upon CMOR Activity Score, if the CMOR should be changed to the requesting site. If it is determined that a patient's CMOR needs to be changed, a single HL7 message is generated for this purpose. The HL7 message is sent from the CMOR to all sites where that patient has been seen and to the MPI.

The Local and Missing ICN background process looks at the Local ICN and Missing ICN cross-reference and sends batch messages to the MPI requesting an ICN. Patients can receive a Local ICN if an attempt to contact the MPI fails. The Missing ICN cross-reference is set if a package outside of PIMS adds a patient to the Patient file.

Batch Messages

Batch messages will be used to send queries to the MPI for ICN during the initialization process, and for resolution of Local or Missing ICNs.

The CMOR Comparison background job sends batch messages to the current CMOR from a non-CMOR requesting the CMOR be changed. This is a process that happens after the MPI Initialization and makes the determination to change the CMOR based upon the CMOR Activity Score, with no user intervention.

Batch Acknowledgments

The acknowledgments returned during the initialization process and the Local/Missing ICN Resolution job are processed through a background job that files the ICN, ICN checksum, and CMOR and updates the Treating Facility list. The return of this data constitutes the acknowledgment of the batch message.

Direct Connect

The Direct Connect is a real-time TCP/IP connection to the Master Patient Index to allow for an immediate request for an ICN. It is activated during the Register A Patient, Load/Edit Patient Data, and 10-10T Registration processes when:

- 1) a new patient is added to the system, or

2) when a patient exists but doesn't have an ICN

In addition, by utilizing the new option Single Patient Initialization to MPI, the TCP/IP direct connection with the MPI will occur. This event causes creation of a VTQ-Q02 and is sent to the MPI to find out if the patient is known. If the MPI returns a message stating that the patient is not known, an ADT-A28 Add Person message is then sent to the MPI. If the patient was known or added via the ADT-A28 message, the MPI will return the known information and the patient's entry is updated.

The new Display Only Query option to view the data the MPI knows about a patient also utilizes the TCP/IP direct connect with the MPI. A VTQ query is sent to the MPI. If the MPI knows the patient or finds a list of potential matches, the data is displayed to the users. No data is updated at the site or the MPI. If the MPI does not know the patient, a message is displayed stating so.

Documentation on the setup and use of this TCP/IP link is provided by the HL7 Patch HL*1.6*43. Readers are also advised to familiarize themselves with the HL7 manual, V 1.6 and the following related patches:

HL*1.6*19

HL*1.6*39

HL7 Control Segments

This section defines the HL7 control segments supported by **VISTA**. The messages are presented separately and defined by category; segments are also described. The messages are presented in the following categories:

- Message Control
- Unsolicited Transactions from **VISTA**

Message Definitions

From the **VISTA** perspective, incoming or outgoing messages are handled or generated based on an event.

In this section, and the sections following, these elements will be defined for each message:

- The trigger events
- The message event code
- A list of segments used in the message
- A list of fields for each segment in the message

Each message is composed of segments. Segments contain logical groupings of data. Segments may be optional or repeatable. A [] indicates the segment is optional, the { } indicates the segment is repeatable. For each message category there will be a list of HL7 standard segments and/or "Z" segments used for the message.

Segment Table Definitions

For each segment, the data elements are described in table format. The table includes the sequence number (SEQ), maximum length (LEN), data type (DT), required or optional (R/O), repeatable (RP/#), the table number (TBL #), the element name, and the **VISTA** description. Each segment is described in the following sections.

Message Control Segments

This section describes the message control segments, which are contained in message-types described in this document. These are generic descriptions. All of the segments described in this section are included in messages in this document. The **VISTA** descriptions and mappings will be as specified here unless otherwise noted.

- MSH — Message Header
- BHS — Batch Header Segment
- BTS — Batch Trailer Segment
- NTE — Notes and Comments Segment (Change CMOR A31)

HL7 Control Segments

- NTE — Notes and Comments Segment (Batch CMOR Comparison)
- MSA — Message Acknowledgment Segment
- EVN — Event Type Segment
- PID — Patient Identification Segment
- PD1 — Patient Demographic
- ZPD — VA Specific Patient Information Segment
- PV1 — Patient Visit Segment
- MRG — Merge Patient Information
- MFI — Master File Identification Segment
- MFE — Master File Entry Segment
- VTQ — Attributes
- RDF — Table Row Definition Segment
- RDT — Table Row Data Segment
- ZEL — VA Specific Patient Eligibility Segment
- ZSP — VA Specific Service Period Segment
- ZCT — VA Specific Emergency Contact Segment
- ZEM — VA Specific Employment Information Segment
- ZFF — VA Specific File/Field Segment
- OBX — Observation/Result Segment

MSH — Message Header Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA ELEMENT NAME
1	1	ST	R			Field Separator	Recommended value is ^ (caret)
2	4	ST	R			Encoding Characters	Recommended delimiter values: Component = ~ (tilde) Repeat = (bar) Escape = \ (back slash) Subcomponent = & (ampersand)
3	15	ST				Sending Application	When originating from facility and the message type is ADT or a Treating Facility Update or an A28 Add Patient: VAFC PIMS When originating from facility and the message type is a query via the Direct Connect: MPI_LOAD When originating from MPI: MPI For batch queries: MPI-STARTUP Batch CMOR Comparison: CMOR COMPARISON Change CMOR: CMOR COM RESULT
4	20	ST				Sending Facility	When originating from facility: Station's facility number When originating from MPI: MPI
5	30	ST				Receiving Application	When originating from facility and the message type is ADT: RG CIRN Treating Facility Update: VAFC PIMS When originating from MPI (not during Initialization) or A28 Add Patient: MPI Direct Connect Query: MPI_ICN From MPI during Initialization: MPI_STARTUP For batch queries: MPI Change CMOR (A31): CMOR COM RESULT Update Patient Data (A31): MPI_LOAD

MSH — Message Header Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA ELEMENT NAME
6	30	ST				Receiving Facility	When originating from facility: Station # When originating from MPI: 200M
7	26	TS				Date/Time Of Message	Date and time message was created
8	40	ST				Security	Not used
9	7	CM	R		0076 0003	Message Type	Component 1: <i>Refer to table 0076</i> Component 2: <i>Refer to table 0003</i>
10	20	ST	R			Message Control ID	Automatically generated by VISTA HL7 Package
11	1	ID	R		0103	Processing ID	P (production)
12	8	ID	R		0104	Version ID	2.3 (version 2.3)
13	15	NM				Sequence Number	Not used
14	180	ST				Continuation Pointer	Not used
15	2	ID			0155	Accept acknowledgment Type	NE (never acknowledge)
16	2	ID			0155	Application acknowledgment Type	AL (always acknowledge)
17	3 ¹	ID				Country Code	USA
18	6	ID		Y/3	0211	Character Set	ASCII
19	60	CE				Principal Language of Message	Not used

Figure 1: HL7 Message Header Segment (MSH)

¹ According to the HL7 Standard, the maximum length of this element is 2.

BHS — Batch Header Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA ELEMENT NAME
1	1	ST	R			Batch Field Separator	Recommended value is ^ (caret)
2	4	ST	R			Batch Encoding Characters	Recommended delimiter values: Component = ~ (tilde) Repeat = (bar) Escape = \ (back slash) Subcomponent = & (ampersand)
3	15	ST				Batch Sending Application	When originating from facility and is MPI Initialization: MPI-STARTUP When originating from MPI in response to Initialization: MPI CMOR Batch Comparison: CMOR COMPARISON
4	20	ST				Batch Sending Facility	When originating from facility: Station's facility number When originating from MPI: 200M
5	15	ST				Batch Receiving Application	When originating from facility for Initialization: MPI CMOR Batch Comparison: CMOR COMPARISON When originating from MPI: MPI_STARTUP
6	20	ST				Batch Receiving Facility	When originating from facility: MPI When originating from MPI: Station's facility number
7	26	TS				Batch Creation Date/Time	Date and time batch message was created
8	40	ST				Batch Security	Not used
9	20	ST				Batch Name/ID/Type	Component 1: Not used Component 2: P Component 3: Sub Component 1: message type Sub Component 2: event type code Component 4: 2.3
10	80	ST				Batch Comment	Component 1: <i>Refer to table 0008</i> Component 2: Text Message

BHS — Batch Header Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA ELEMENT NAME
11	20	ST				Batch Control ID	Automatically generated by VISTA HL7 Package
12	20	ST				Reference Batch Control ID	Batch Control ID of batch message being acknowledged

Figure 2: HL7 Batch Header Segment (BHS)

BTS — Batch Trailer Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA ELEMENT NAME
1	10	ST			0093	Batch Message Count	Number of messages within batch
2	80	ST			0094	Batch Comment	Not used
3	100	CM		Y	0095	Batch Totals	Not used

Figure 3: HL7 Batch Trailer Segment (BTS)

NTE — Notes and Comments Segment (Change CMOR A31)

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA ELEMENT NAME
1	4	SI				Set ID	Not used
2	8	ID			0105	Source of Comment	P
3	64k	FT		Y		Comment	Component 1: Phone Component 2: Reason for request Component 3: Status Component 4: ID (.01 field of request) Component 5: Requestor (Station Number of CMOR)

Figure 4: HL7 Notes and Comments Segment (NTE) — Change CMOR A31

NTE — Notes and Comments Segment (Batch CMOR Comparison)

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA ELEMENT NAME
1	20	ST				Reason	COMPARISON
2	3	ST				CMOR Station	Station # of CMOR

Figure 5: HL7 Notes and Comments Segment (NTE) — Batch CMOR Comparison

MSA — Message Acknowledgment Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA ELEMENT NAME
1	2	ID	R		0008	Acknowledgment Code	<i>Refer to table 0008</i>
2	20	ST	R			Message Control ID	Message Control ID of message being acknowledged
3	80	ST			NPCD 001	Text Message	Description of event
4	15	NM				Expected Sequence Number	Not used
5	1	ID			0102	Delayed Acknowledgment Type	Not used
6	100	CE				Error Condition	Description of error condition

Figure 6: HL7 Message Acknowledgment Segment (MSA)

EVN — Event Type Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA ELEMENT NAME
1	3	ID	R		0003	Event Type Code	<i>Refer to table 0003</i>
2	26	TS	R			Recorded Date/Time	Date/Time event occurred
3	26	TS				Date/Time Planned Event	Not used
4	3	ID			0062	Event Reason Code	<i>Refer to table 0062</i>
5	60	CN				Operator ID	User causing event
6	26	TS				Event Occurred	Not used

Figure 7: HL7 Event Type Segment (EVN)

PID — Patient Identification Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA ELEMENT NAME
1	4	SI				Set ID - Patient ID	Sequential Number
2	20	CK				Patient ID (External ID)	Integration Control Number (ICN)
3	21 ¹	CM	R	Y		Patient ID (Internal ID)	Pointer to entry in PATIENT file
4	12	ST				Alternate Patient ID	Primary Short ID
5	48	PN	R			Patient Name	Name
6	30	ST				Mother's Maiden Name	Mother's maiden name
7	26	TS				Date of Birth	Date of birth
8	1	ID			0001	Sex	<i>Refer to table 0001</i>

¹ According to the HL7 Standard, the maximum length of this element is 20.

PID — Patient Identification Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA ELEMENT NAME
9	48	PN		Y		Patient Alias	Alias
10	1	ID			VA07	Race	Race
11	106	AD		Y		Patient Address	Address components Component 1: Street Address (line 1) Component 2: Street Address (line 2) Component 3: City Component 4: State (abbrev.) Component 5: ZIP + 4 Component 8: Street Address (line 3) Component 9: VA County Code
12	4	ID				County Code	VA County code
13	40	TN		Y		Phone Number - Home	Phone number (residence)
14	40	TN		Y		Phone Number - Business	Phone number (work)
15	25	ST				Language - Patient	Not used
16	1	ID			0002	Marital Status	<i>Refer to table 0002</i>
17	3	ID			VA08	Religion	Religion
18	20	CK				Patient Account Number	Not used
19	16	ST				SSN Number - Patient	Social security number and pseudo-indicator
20	25	CM				Driver's Lic Num - Patient	Not used
21	20	CK				Mother's Identifier	Not used
22	1	ID			0189	Ethnic Group	Not used
23	25	ST				Birth Place	Not used
24	2	ID				Multiple Birth Indicator	Not used
25	2	NM				Birth Order	Not used
26	3	ID		Y	0171	Citizenship	Not used
27	60	CE			0172	Veterans Military Status	Not used
28	80	CE			0212	Nationality	Not used
29	26	TS				Patient Death Date and Time	Date of Death
30	1	ID			0136	Patient Death Indicator	'Y' if Date of Death exists

Figure 8: HL7 Patient Identification Segment (PID)

PD1 — Patient Demographic

SEQ	LEN	DT	R/O	RP/#	TBL#	ITEM#	ELEMENT NAME	VISTA ELEMENT NAME
1	2	ID	O	Y	0223	00755	Living Dependency	Not used
2	2	ID	O		0220	00742	Living Arrangement	Not used
3	90	XON	O	Y		00756	Patient Primary Facility	Component 1: CIRN Master of Record Component 2: Not Used Component 3: VA Station Number
4	90	XCN	O	Y		00757	Patient Primary Care Provider Name & ID No.	Not used
5	2	ID	O			00758	Student Indicator	Not used
6	2	ID	O			00753	Handicap	Not used
7	2	ID	O			00759	Living Will	Not used
8	2	ID	O			00760	Organ Donor	Not used
9	2	ID	O			00761	Separate Bill	Not used
10	2	CM	O	Y		00762	Duplicate Patient	Not used
11	1	CE	O		0125	00743	Publicity Indicator	Not used
12	1	ID	O		01293	01283	Protection Indicator	Not used

Figure 9: HL7 Patient Demographic (PD1)

ZPD — VA Specific Patient Information Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	VISTA ELEMENT NAME
1	4	SI	R			Set ID - Patient ID
2	60	ST				Remarks
3	20	ST				Place of Birth City
4	2	ST				Place of Birth State
5	2	ID			VA02	Current Means Test Status
6	35	ST				Father's Name
7	35	ST				Mother's Name
8	1	ID			VA01	Rated Incompetent
9	19	TS				Date of Death
10	48	PN				Collateral Sponsor
11	1	ID			VA01	Active Health Insurance?
12	1	ID			VA01	Covered by Medicaid?

ZPD — VA Specific Patient Information Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	VISTA ELEMENT NAME
13	19	TS				Date Medicaid Last Asked
14	1	ID			VA07	Race ¹
15	3	ID			VA08	Religion ²
16	1	ID			VA01	Homeless Indicator
17	1	ST				POW Status Indicated?
18	2	ID			VA12	Type of Insurance
19	1	ID			VA14	MECIDATION COPAYMENT EXCEMPTION
20	22	CE			VA23	PRISONER OF WAR LOCATION
21	30	ST				PRIMARY CARE TEAM

Figure 10: HL7 VA Specific Patient Information Segment (ZPD)

PV1 — Patient Visit Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA ELEMENT NAME
1	4	SI				Set ID - Patient Visit	Sequential Number
2	1	ID	R		0004	Patient Class	O= outpatient I= inpatient
3	12	CM				Assigned Patient Location	Not used
4	4	ID				Admission Type	<i>Not used</i>
5	20	ST				Preadmit Number	Not used
6	12	CM				Prior Patient Location	Not used
7	60	CN			0010	Attending Doctor	Not used
8	60	CN			0010	Referring Doctor	Not used
9	60	CN		Y	0010	Consulting Doctor	Not used
10	3	ID			0069	Hospital Service	Not used
11	12	CM				Temporary Location	Not used
12	2	ID			0087	Preadmit Test Indicator	Not used
13	2	ID			0092	Readmission Indicator	Not used
14	3	ID			0023	Admit Source	<i>Refer to table 0023 (Location of Visit)</i>
15	2	ID		Y	0009	Ambulatory Status	Not used
16	2	ID			0099	VIP Indicator	Not used
17	60	CN			0010	Admitting Doctor	Not used
18	2	ID			0018	Patient Type	Not used

¹ This element is also found in the Patient Identification (PID) segment.

² This element is also found in the Patient Identification (PID) segment.

PV1 — Patient Visit Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	ELEMENT NAME	VISTA ELEMENT NAME
19	15	NM				Visit Number	Pointer to entry in OUTPATIENT ENCOUNTER file
20	50	CM		Y	0064	Financial Class	Not used
21	2	ID			0032	Charge Price Indicator	Not used
22	2	ID			0045	Courtesy Code	Not used
23	2	ID			0046	Credit Rating	Not used
24	2	ID		Y	0044	Contract Code	Not used
25	8	DT		Y		Contract Effective Date	Not used
26	12	NM		Y		Contract Amount	Not used
27	3	NM		Y		Contract Period	Not used
28	2	ID			0073	Interest Code	Not used
29	1	ID			0110	Transfer to Bad Debt Code	Not used
30	8	DT				Transfer to Bad Debt Date	Not used
31	10	ID			0021	Bad Debt Agency Code	Not used
32	12	NM				Bad Debt Transfer Amount	Not used
33	12	NM				Bad Debt Recovery Amount	Not used
34	1	ID			0111	Delete Account Indicator	Not used
35	8	DT				Delete Account Date	Not used
36	3	ID			0112	Discharge Disposition	Not used
37	25	CM			0113	Discharged to Location	Not used
38	2	ID			0114	Diet Type	Not used
39	7	ID			0115	Servicing Facility	Not used
40	1	ID			0116	Bed Status	Not used
41	2	ID			0117	Account Status	Not used
42	12	CM				Pending Location	Not used
43	12	CM				Prior Temporary Location	Not used
44	26	TS				Admit Date/Time	Date/time of encounter
45	26	TS				Discharge Date/Time	Not used
46	12	NM				Current Patient Balance	Not used
47	12	NM				Total Charges	Not used
48	12	NM				Total Adjustments	Not used
49	12	NM				Total Payments	Not used
50	20	CM				Alternate Visit ID	Unique Identifier (PCE)
51	1	IS			0326	Visit Indicator	Not used
52	60	XCN		Y	0010	Other Healthcare Provider	Not used

Figure 11: HL7 Patient Visit Segment (PV1)

MRG — Merge Patient Information

SEQ	LEN	DT	R/O	RP#	TBL#	ITEM#	ELEMENT NAME	VISTA ELEMENT NAME
1	20	CM	R			00211	Prior Patient ID - Internal	ICN
2	16	ST				00212	Prior Alternate Patient ID	
3	20	CK				00213	Prior Patient Account Number	
4	16	CK				00214	Prior Patient ID - External	
5	20	CX				01279	Prior Visit Number	
6	20	CX				01280	Prior Alternate Visit	
7	48	XPN				01281	Prior Patient Name	

Figure 12: HL7 Merge Patient Information (MRG)

MFI — Master File Identification Segment

SEQ	LEN	DT	R/O	RP#	TBL#	ELEMENT NAME	VISTA ELEMENT NAME
1	60	CE	R	N	0175	Master File Identifier	'TFL' for Treating Facility updates
2	180	HD	O		0176	Master File Application Identifier	Not used
3	3	ID	R		0178	File-Level Event Code	'REP' or 'UPD'
4	26	TS	O			Entered Date/Time	Not used
5	26	TS	O			Effective Date/Time	Not used
6	2	ID	R		0179	Response Level Code	'NE'
7	20	ST				Facility	Component 1: Station Number Component 2: Facility Name

Figure 13: HL7 Master File Identification Segment (MFI)

MFE — Master File Entry Segment

SEQ	LEN	DT	R/O	RP#	TBL#	ELEMENT NAME	VISTA ELEMENT NAME
1	3	ID	R		0180	Record-Level Event Code	'MAD' for Treating Facility updates
2	20	ST	C			MFN Control ID	Not used
3	26	TS				Effective Date/Time	Date Last Treated from file 391.91 Treating Facility List
4	60	CE	R	Y		Primary Key Value	For Treating Facility updates: Component 1: Station Number Component 2: Institution Name Component 3: 'VA' Component 4: ICN Component 5: 'ICN' Component 6: 'VA'

Figure 14: HL7 Master File Entry Segment (MFE)

VTQ — Attributes

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME	VISTA ELEMENT NAME
1	32	ST	O			00696	Query Tag	Sequence Number identifier
2	1	ID	R		0106	00697	Query/Response Format Code	See Table 0106: CIRN V.1.0 uses only 'T'
3	60	CE	R			00698	VT Query Name	See table VA-13 VT Query Name
4	60	CE	R			00699	Virtual Table Name	Logical name (i.e., ICN)
5	256	QSC	O	Y		00700	Selection Criteria	Qualifier field Name (see Table VA-14 VTQ Selection Criteria) Relational Operator (see Table 0209) Relational Conjunction (see Table 0210)

Figure 15: HL7 Attributes (VTQ)

RDF — Table Row Definition Segment

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME	VISTA ELEMENT NAME
1	3	NM	R			00701	Number of Columns per Row	Number of data elements to be returned
2	40	RCD	R	Y		00702	Column Description	Component 1: HL7 Field Number Component 2: Data Type Component 3: Max. length

Figure 16: HL7 Table Row Definition Segment (RDF)

RDT — Table Row Data Segment

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME	VISTA ELEMENT NAME
1-n	Variable	Variable	R			00703	Column Value	Actual data found

Figure 17: HL7 Table Row Data Segment (RDT)

ZEL — VA Specific Patient Eligibility Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	VISTA ELEMENT NAME
1	4	SI	R			SET ID
2	2	ID			VA04	Eligibility code
3	16	CK				Long ID
4	12	ST				Short ID
5	1	ID			VA05	Disability Retirement From Mil.
6	8	NM				Claim folder number
7	40	ST				Claim folder location
8	1	ID			VA01	Veteran?
9	30	ST				Type of patient
10	1	ID			VA06	Eligibility Status
11	8	DT				Eligibility Status Date
12	8	DT				Eligibility Interim Response
13	50	ST				Eligibility Verification Method
14	1	ID			VA01	RECEIVING A&A BENEFITS?
15	1	ID			VA01	RECEIVING HOUSEBOUND BENEFITS?
16	1	ID			VA01	RECEIVING A VA PENSION?
17	1	ID			VA01	RECEIVING A VA DISABILITY?
18	1	ID			VA01	EXPOSED TO AGENT ORANGE
19	1	ID			VA01	RADIATION EXPOSURE INDICATED
20	1	ID			VA01	ENVIRONMENTAL CONTAMINANTS
21	5	NM			VA01	TOTAL ANUAL VA CHECK AMOUNT
22	22	CE			VA0122	RADIATION EXPOSURE METHOD

Figure 18: HL7 VA Specific Patient Eligibility Segment (ZEL)

ZSP — VA Specific Service Period Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	VISTA ELEMENT NAME
1	4	SI	R			Set ID
2	1	ID	R		VA01	Service Connected?
3	3	NM				Service Connected Percentage
4	2	ID			VA11	Period of Service
5	1	ST				Vietnam Service Indicated?

Figure 19: HL7 VA Specific Service Period Segment (ZSP)

ZCT — VA Specific Emergency Contact Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	VISTA ELEMENT NAME
1	4	SI	R			Set ID
2	1	ID			VA01	Next of Kin (NOK)
3	35	ST				Name of NOK
4	30	ST				Relationship of NOK
5	106	AD		Y		Component 1:K-Street Address (line 1) Component 2:K-Street Address (line 2) & K-Street Address (line 3) Component 3:K-City Component 4: K-State (abbreviation) Component 5: K-ZIP code
6	40	TN		Y		K-Phone Number
7	40	TN		Y		K-Work phone number
8	1	ID			VA01	Contact address same as NOK?
9	1	ID			VA01	Contact person same as NOK?

Figure 20: HL7 VA Specific Emergency Contact Segment (ZCT)

ZEM — VA Specific Employment Information Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	VISTA ELEMENT NAME
1	4	SI	R			SET ID
2	1	ID			VA01	Patient Data Requested?
3	1	ID			VA15	Employment Status
4	30	ST				Employer Name
5	30	ST				Occupation
6	106	AD		Y		Component 1: Employer Street (line 1) Component 2: Employer Street (line 2 & line 3) Component 3: Employer City Component 4: Employer State Component 5: Employer ZIP Code
7	40	TN		Y		Employer Phone number
8	1	ID			VA01	Government Agency?

Figure 21: HL7 VA Specific Employment Information Segment (ZEM)

ZFF — VA Specific File/Field Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	VISTA ELEMENT NAME
1	20	NM	R			File Number
2	150	ST	R			Field Number(s)

Figure 22: HL7 VA Specific File/Field Segment (ZFF)

OBX — Observation/Result Segment

SEQ	LEN	DT	R/O	RP/#	TBL#	Item#	Element Name	VISTA ELEMENT NAME
1	10	SI	O			00569	Set ID - OBX	Not used
2	2	ID	C		0125	00570	Value Type	CE
3	590	CE	R			00571	Observation Identifier	38.1^SECURITY LOG
4	20	ST	C			00572	Observation Sub-ID	Not used
5	65536 ¹	*	C	Y ²		00573	Observation Value	Sensitive= 1 Not Sensitive or No Value= 0
6	60	CE	O			00574	Units	Not used
7	10	ST	O			00575	References Range	Not used
8	5	ID	O	Y/5	0078	00576	Abnormal Flags	Not used
9	5	NM	O			00577	Probability	Not used
10	2	ID	O	Y	0080	00578	Nature of Abnormal Test	Not used
11	1	ID	R		0085	00579	Observe Result Status	R=Results entered, Not verified
12	26	TS	O			00580	Date Last Obs Normal Values	Not used
13	20	ST	O			00581	User Defined Access Checks	Not used
14	26	TS	O			00582	Date/Time of the Observation	Date if found in VISTA
15	60	CE	O			00583	Producer's ID	Not used
16	80	XCN	O			00584	Responsible Observer	Name if found in VISTA
17	60	CE	O	Y		00936	Observation Method	Not used

Figure 23: HL7 Observation/Result Segment (OBX)

¹ The length of the observation value field is variable, depending upon value type. See *OBX-2-value type*.

² May repeat for multipart, single answer results with appropriate data types, e.g., CE, TX, and FT data types.

Unsolicited HL7 Messages

Trigger Events and Message Definitions Broadcast to Sites and to the MPI

Listed below is a compilation of the trigger events and the corresponding HL7 message that the MPI package generates or is interested in. The notation used to describe the sequence, optionally, and repetition of segments are described in the HL7 manual, Chapter 2, "Format for Defining Abstract Messages."

ADT A04 Message — Register a Patient

This event is only triggered after the successful completion of a Patient Registration using the Registration menu options Register a Patient. This message is currently broadcast real-time. The example below constitutes a PIMS-generated HL7 message.

ABBREVIATED NAME	FULL NAME
MSH	Message Header
EVN	Event Type
PID	Patient Identification
PD1	Additional Demographics
PV1	Patient Visit
OBX	Observation/Result
ZPD	VA-Specific Patient Information
ZSP	VA Specific Service Period
ZEL	VA Specific Eligibility Information
ZCT	VA Specific Emergency Contact Information
ZEM	VA Specific Employment Information
ZFF	VA Specific File/Field

Figure 24: HL7 ADT A04 message type (Register a Patient)

Field Number	Field Name
.01	NAME
.02	SEX
.03	DATE OF BIRTH
.05	MARITAL STATUS
.08	RELIGIOUS PREFERENCE
.09	SOCIAL SECURITY NUMBER
.111	STREET ADDRESS
.112	STREET ADDRESS [2]
.114	CITY
.115	STATE
.1112	ZIP+4
.117	COUNTY
.301	SERVICE CONNECTED
.302	SERVICE CONNECTED PERCENTAGE
.31115	EMPLOYMENT STATUS
.323	PERIOD OF SERVICE
.361	PRIMARY ELIGIBILITY CODE
391	PATIENT TYPE
1901	VETERAN (Y/N)
.351	DATE OF DEATH
.2403	MOTHER'S MAIDEN NAME
.131	PHONE NUMBER [RESIDENCE]
.132	PHONE NUMBER [WORK]
.219	K-PHONE NUMBER
.211	K-NAME
991.01	INTEGRATION CONTROL NUMBER

Figure 26: Data elements monitored in the PATIENT file (file #2) for changes

ADT A29 Message — Delete Person Information

An A29 event can be used to delete demographic information related to a given person. The fields, included when this message is sent, should be only the fields necessary to communicate this event. When other important fields change, it is recommended that the A08-Update event be used instead. Only the CMOR can trigger the A29 message to the MPI. In addition, the patient cannot have any other subscribers.

ABBREVIATED NAME	FULL NAME
MSH	Message Header
EVN	Event Type
PID	Patient Identification
PD1	Additional Demographics
PV1	Patient Visit

Figure 31: HL7 ADT A29 message type (Delete Person Information)

Sample message:

```
MSH^~|\&^MPI A29 SERVER^662^MPI^MPI^19980817063410^^
  ADT~A29^192^P^2.3^^NE^AL^|
EVN^A29^2980817.06341^^^
PID^^1000310536V304686^247~7~M10^^DOE~JOHNNY^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
```

Figure 32: Sample HL7 ADT A29 message (Delete Person Information)

ADT A30 Message — Merge Person Information

An A30 event is used to correct the ICN for a given patient. This message will be sent to all sites that know about the "incorrect ICN" and the MPI. The "incorrect ICN" identified on the MRG segment (*MRG-1*) is to be merged with the "correct ICN" identified on the PID segment (*PID-3*). The "incorrect ICN" then is placed in the ICN History multiple. The site initiating the Merge message must be the CMOR of both patients. The message is sent to all sites that know the patients and to the MPI.

The A30 event is not being used to "merge" patient records, but to change the ICN.

ABBREVIATED NAME	FULL NAME
MSH	Message Header
EVN	Event Type
PID	Patient Identification
PD1	Additional Demographics
PV1	Patient Visit
MRG	Merge Information

Figure 33: HL7 ADT A30 message type (Merge Person Information)

Sample message:

```
MSH^~|\&^MPI A30 SERVER^662^MPI^MPI^19980723104335^
^ADT~A30^163^P^2.3^^NE^AL^USA|
EVN^A30^2980723.104335^^^
PID^1^1000646316V698194^249~3~M10^3890^DOE~JOHN^"^^19680702^M^^7^200
SYCAMORE ST~"~JACKSONVILLE~NC~28546~~~"~133^133^"^^"^^^29^
^000023890^^^^^^^^^^
MRG^1000646317
```

Figure 34: Sample HL7 ADT A30 message (Merge Person Information)

MFN — Update Treating Facility

A treating facility list is a list of medical centers where the veteran has been seen. If this list is updated through the appropriate APIs, this event will be added to the ADT/HL7 Pivot file and marked for transmission. A background job will then collect the events and broadcast an MFN message. Direct sets to the Treating Facility List global will not trigger this event. This is a PIMS-generated HL7 message that was designed for CIRN/MPI.

ABBREVIATED NAME	FULL NAME
MSH	Message Header
MFI	Master File Identification Segment
MFE	Master File Entry Segment

Figure 35: HL7 Update Treating Facility message type (MFN)

A Master File Treating Facility Update message can be generated either by a patient’s primary facility (CMOR) or from a non-owner (non-CMOR). If it is generated from the owner, the MFI segment will be different.

(From Owner) In this case, sequence number 3 "File-level event code" will contain "REP." This indicates that the receiving application should replace their Treating Facility List with what is in the message. This message is sent to the MPI and any other treating facilities that share this patient.

Sample message:

```
MSH^~|\&^VAFC PIMS^573^VAFC PIMS^573^19980702163006^^MFN~M05^3858303^P^
2.3^^^NE
^NE^USA|
MFI^TFL^^REP^^^NE^573~GAINESVILLE
MFE^MAD^^19980702^573~GAINESVILLE~VA~1000321432~ICN~VA
MFE^MAD^^19980702^673~TAMPA, FL~VA~1000321432~ICN~VA
```

Figure 36: Sample HL7 Update Treating Facility (MFN) message from Owner

(From Non-owner) In this case, sequence number 3 will contain "UPD." This indicates to the receiving application that the information in the message should be added to their current list. This message is only sent to the CMOR.

Sample message:

```
MSH^~|\&^VAFC PIMS^673^VAFC PIMS^673^19980702163006^^MFN~M05^3858303^P^2.3^
^^NE^NE^USA|
MFI^TFL^^UPD^^^NE^573~GAINVILLE
MFE^MAD^^19980702^673~TAMPA, FL~VA~1000321432~ICN~VA
```

Figure 37: Sample HL7 Update Treating Facility (MFN) message from Non-owner

VQQ — Virtual Table Query (Event Q01)

ABBREVIATED NAME	FULL NAME
MSH	Message Header
VTQ	VTQ Definition
RDF	Table Row Definition
RDT	Table Row Data Segment

Figure 38: HL7 Virtual Table Query (VQQ) message type — Event Q01

The MPI *VISTA* software utilizes the HL7 item numbers from the HL7 V. 2.3 Standard to identify the fields in a VTQ segment. A VTQ segment in the HL7 2.3 standard is used to address the needs of adding and identifying patients to the MPI.

The VQQ message is utilized during the Initialization process and resolution of Local and Missing ICNs in a batch message. It is also used during the Direct Connect functionality to query the MPI in real-time.

Sample of Batch Initialization Message to the MPI:

```

BHS^~|\&^MPI-STARTUP^573^MPI^MPI^19980522111248^^~P~VQQ|Q02~2.3^^3689580^
MSH^~|\&^MPI-STARTUP^573^^^^^VQQ~Q02^3358741-1^P^2.3^^^NE^AL|
VTQ^513598^T^VTQ_PID_ICN_LOAD_1^ICN^@00108.1~EQ~SMITH
SR.~AND|@00122~EQ~266568187~AND|@00108.2~EQ~WILLIAM~AND|@00110~EQ~19400110
~
AND|@00111~EQ~M~AND|@00126.1~EQ~WINTERHAVEN~AND|@00126.2~EQ~12

RDF^9^@00108.1~ST~16|@00122~ST~9|@00110~TS~8|@00756~ST~30|@00105~ST~19|@00
108.2
~ST~16|@00169~ST~30|@00740~TS~8|@00108.3~ST~16
MSH^~|\&^MPI-STARTUP^573^^^^^VQQ~Q02^3358741-2^P^2.3^^^NE^AL|
VTQ^7227887^T^VTQ_PID_ICN_LOAD_1^ICN^@00108.1~EQ~KEARNEY~AND|@00122~EQ~252
247315~AND|@00108.2~EQ~JONES~AND|@00110~EQ~19240921~AND|@00111~EQ~M~AND|@0
0126.1~EQ~GOOD~AND|@00126.2~EQ~13

RDF^9^@00108.1~ST~16|@00122~ST~9|@00110~TS~8|@00756~ST~30|@00105~ST~19|@00
108.2
~ST~16|@00169~ST~30|@00740~TS~8|@00108.3~ST~16
MSH^~|\&^MPI-STARTUP^573^^^^^VQQ~Q02^3358741-3^P^2.3^^^NE^AL|
VTQ^7246248^T^VTQ_PID_ICN_LOAD_1^ICN^@00108.1~EQ~SCHNEIDER~AND|@00122~EQ~3
60039771~AND|@00108.2~EQ~CLIFFORD~AND|@00110~EQ~19210820~AND|@00111~EQ~M~A
ND|@00126.2~EQ~29|

RDF^9^@00108.1~ST~16|@00122~ST~9|@00110~TS~8|@00756~ST~30|@00105~ST~19|@00
108.2
~ST~16|@00169~ST~30|@00740~TS~8|@00108.3~ST~16
MSH^~|\&^MPI-STARTUP^573^^^^^VQQ~Q02^3358741-4^P^2.3^^^NE^AL|
VTQ^85368^T^VTQ_PID_ICN_LOAD_1^ICN^@00108.1~EQ~TURNER~AND|@00122~EQ~315543
066~AND|@00108.2~EQ~LARRY~AND|@00110~EQ~19500404~AND|@00111~EQ~M~AND|@0012
6.1~EQ~LONDON~AND|@00126.2~EQ~21

RDF^9^@00108.1~ST~16|@00122~ST~9|@00110~TS~8|@00756~ST~30|@00105~ST~19|@00
108.2
~ST~16|@00169~ST~30|@00740~TS~8|@00108.3~ST~16
BTS^4

```

Figure 39: Sample HL7 Virtual Table Query (VQQ) message — Event Q01 (MPI Batch Initialization)

Sample of a Direct Connect VQQ query:

```
MSH|^~\&|MPI_LOAD|673|MPI-ICN|||VQQ^Q02|7307018-1|
VTQ|7307018|T|VTQ_PID_ICN|ICN|@00108.1^EQ^WHEELER^AND~@00122^EQ^578160290^
AND~@00108.2^EQ^HARRY^AND~@00110^EQ^19160605
RDF|9|@00108.1^ST^16~@00122^ST^9~@00110^TS^8~@00756^ST^30~@00105^ST^19~@00
108.2^ST^16~@00169^ST^30~@00740^TS^8~@00108.3^ST^16^
```

Figure 40: Sample HL7 Virtual Table Query (VQQ) message — Event Q01 (Direct Connect Query)

Trigger Events and Message Definitions Received

VQQ — Virtual Table Query Response

ABBREVIATED NAME	FULL NAME
MSH	Message Header
MSA	Message Acknowledgement
QAK	Query Acknowledgement
RDF	Table Row Definition
RDT	Table Row Data Segment

Figure 41: HL7 Virtual Table Query Response (VQQ) message type

The MPI *VISTA* software, utilizes the HL7 item numbers from the HL7 V. 2.3 Standard to identify the fields in a VTQ segment. A VTQ segment in HL7 2.3 standard is used to address the needs of adding and identifying patients' to the MPI.

Sample message that MPI Austin returns in response to an Initialization Message:

```

BHS^~|\&^MPI^MPI^MPI-STARTUP^^19980522114545^^~P~ACK|Q02~2.3^AA^3689580
^3689580
MSH^~|\&^MPI^MPI^MPI-STARTUP^573^^^ACK^3358741-1^P^2.3|
MSA^AA^3358741-1
QAK^513598^OK

RDF^9^@00108.1~ST~16|@00122~ST~9|@00110~TS~8|@00756~ST~30|@00105~ST~19|@00
108.2~ST~16|@00169~ST~30|@00740~TS~8|@00108.3~ST~16
RDT^JONES SR.^266568187^19400110^573^1000313417V193614^WILLIAM^573^^
MSH^~|\&^MPI^MPI^MPI-STARTUP^573^^^ACK^3358741-2^P^2.3|
MSA^AA^3358741-2
QAK^7227887^OK

RDF^9^@00108.1~ST~16|@00122~ST~9|@00110~TS~8|@00756~ST~30|@00105~ST~19|@00
108.2~ST~16|@00169~ST~30|@00740~TS~8|@00108.3~ST~16
RDT^KEARNEY^252247315^19240921^573^1000313418V329176^LESTER^573^^
MSH^~|\&^MPI^MPI^MPI-STARTUP^573^^^ACK^3358741-3^P^2.3|
MSA^AA^3358741-3
QAK^7246248^OK

RDF^9^@00108.1~ST~16|@00122~ST~9|@00110~TS~8|@00756~ST~30|@00105~ST~19|@00
108.2~ST~16|@00169~ST~30|@00740~TS~8|@00108.3~ST~16
RDT^SCHNEIDER^360039771^19210820^573^1000313420V403579^CLIFFORD^573^^
MSH^~|\&^MPI^MPI^MPI-STARTUP^573^^^ACK^3358741-4^P^2.3|
MSA^AA^3358741-4
QAK^85368^OK

RDF^9^@00108.1~ST~16|@00122~ST~9|@00110~TS~8|@00756~ST~30|@00105~ST~19|@00
108.2~ST~16|@00169~ST~30|@00740~TS~8|@00108.3~ST~16
RDT^TURNER^315543066^19500404^573^1000313421V689904^LARRY^573^^
BTS^4
    
```

Figure 42: Sample HL7 Virtual Table Query Response (VQQ) message — MPI Batch Initialization

ADT A31 Message — Update Person Information

After a patient is either selected or added to the MPI, outside of the initialization process, an ADT-A31 message is sent via the Direct Connect process from the MPI back to the site. This message identifies the patient and contains the newly assigned or existing ICN.

ABBREVIATED NAME	FULL NAME
MSH	Message Header
MSA	Message Acknowledgement
QAK	Query Acknowledgement Segment
RDF	Table Row Definition
RDT	Table Row Data Segment

Figure 43: HL7 ADT A31 message type (Update Person Information)

Sample message:

```
MSH|^~\&|MPI|MPI|MPI_LOAD|516|||ADT^A31|126475-1|P|2.3
MSA|AA|126475-1
QAK|126475|OK
RDF|9|@00108.1^ST^16~@00122^ST^9~@00110^TS^8~@00756^ST^30~@00105^ST^19~@00
108.2^ST^16~@00169^ST^30~@00740^TS^8~@00108.3^ST^16
RDT|CLAYTON|011528127|19611206|573|1000118458V711894|ERNEST|573||
```

Figure 44: Sample HL7 ADT A31 message (Update Person Information)

ADT A31 Message — Change CIRN Master of Record (CMOR)

An A31 message is also used to update CMOR information. The options on the CIRN Master of Record (CMOR) Request menu [RGVC MGR] use the A31 event to a) request a change in CMOR (site-to-site), b) to approve or disapprove a CMOR change (site-to-site), and c) to send out the CMOR change information to subscribers.

ABBREVIATED NAME	FULL NAME
MSH	Message Header
PID	Patient Identification
NTE	Notes and Comments: CMOR Change Information
EVN	Event Type

Figure 45: HL7 ADT A31 message type [Change CIRN Master of Record (CMOR)]

Sample of change of CMOR message to sites/MPI:

```
MSH^~|\&^CMOR COM RESULT^500^CMOR COM RESULT^500^199801121
61216^^ADT~A31^5^P^2.3^^^^AL^USA
PID^^14V22^1~1~M10^6677^JENNIE~JAMBIE~T.^HERMAN^19350303^M^^2^^^
^^^^^^^^^^^^^^^^^^^^
EVN^A31^2980112^100^POSTMASTER
NTE^^P^^^^^662
```

Figure 46: Sample HL7 ADT A31 Message [Change CIRN Master Of Record (CMOR)]

ADT A31 Message — Batch CMOR Comparison

This is used for background job to automatically change the CMOR to the requesting site if the difference in CMOR Activity Score is greater than 80%. IT sends a message back to the requestor for those that are to be changed.

ABBREVIATED NAME	FULL NAME
BHS	Batch Header Segment
MSH	Message Header
PID	Patient Identification
EVN	Event Type
NTE	Notes and Comments: CMOR Change Information
BTS	Batch Trailer Segment

Figure 47: HL7 ADT A31 message type (Batch CMOR Comparison)

Appendix A

HL7 Standard Tables

Table 0001 — Sex

VALUE	DESCRIPTION
F	Female
M	Male
O	Other
U	Unknown

Table 0002 — Marital Status (user defined)

VALUE	DESCRIPTION
A	Separated
D	Divorced
M	Married
W	Widow/Widower
S	Never Married
U	Unknown

Table 0003 — ADT/R Event Type Codes

VALUE	DESCRIPTION
A04 ADT/ACK	Register a patient
A08 ADT/ACK	Update patient information
A28 ADT/ACK	Add person information
A29 ADT/ACK	Delete person information
A30 ADT/ACK	Merge person information
A31 ADT/ACK	Update person information
M05 MFN/MFK	Patient location master file
Q02 QRY/QCK	Query sent for deferred response

Table 0008 — Acknowledgment Code

VALUE	DESCRIPTION
AA	Original mode: Application Accept Enhanced mode: Application Acknowledgment: Accept
AE	Original mode: Application Error Enhanced mode: Application Acknowledgment: Error
AR	Original mode: Application Reject Enhanced mode: Application Acknowledgment: Reject
CA	Enhanced mode: Accept Acknowledgment: Commit Accept
CE	Enhanced mode: Accept Acknowledgment: Commit Error
CR	Enhanced mode: Accept Acknowledgment: Commit Reject

Table 0023 — Admit Source (user defined)
Sample listing of possible values used for Location of Visit

VALUE	DESCRIPTION
1	This facility
6	Other facility

Table 0062 — Event Reason (user defined)

VALUE	DESCRIPTION
01	Patient Request
02	Physician Order
03	Census Management
04	Update to Old Event
05	Update to New/Current Event
97	Sensitivity Update
99	Date of Death

Table 0076 — HL7 Message Type
Sample of possible values

VALUE	DESCRIPTION
ADT	ADT Message
MFN	Master File Notification

Table 0106 — Query/Response Format Code

VALUE	DESCRIPTION
D	Response is in display format
R	Response is in record-oriented format
T	Response is in tabular format

Table 0115 — Servicing Facility (user defined)
Sample of possible values

VALUE	DESCRIPTION
512 9AC	Perry Point (Nursing Home)

Table 0125 - Value type (new)

VALUE	DESCRIPTION
AD	Address
CE	Coded Entry
CF	Coded Element With Formatted Values
CK	Composite ID With Check Digit
CN	Composite ID And Name
CP	Composite Price
CX	Extended Composite ID With Check Digit
DT	Date
ED	Encapsulated Data
FT	Formatted Text (Display)
MO	Money
NM	Numeric
PN	Person Name
RP	Reference Pointer
SN	Structured Numeric
ST	String Data.
TM	Time
TN	Telephone Number
TS	Time Stamp (Date & Time)
TX	Text Data (Display)
XAD	Extended Address
XCN	Extended Composite Name And Number For Persons
XON	Extended Composite Name And Number For Organizations

Table 0125 - Value type (new)

VALUE	DESCRIPTION
XPN	Extended Person Number
XTN	Extended Telecommunications Number

Table 0136 — Patient Death Indicator

VALUE	DESCRIPTION
Y	Yes

Table 0209 — Relational Operator

RELATIONAL OPERATOR	VALUE
EQ	Equal
NE	Not Equal
LT	Less than
GT	Greater than
LE	Less than or equal
GE	Greater than or equal
CT	Contains
GN	Generic

Table 0210 — Relational Conjunction

RELATIONAL CONJUNCTION	NOTE
AND	Default
OR	

Table 175 — Master File Identifier Code

VALUE	DESCRIPTION
TFL	Treating Facility Master File (Local Agreement)

Table 178 — File Level Event Code

VALUE	DESCRIPTION
REP	Replace current version of this master file with the version contained in this message
UPD	Change file records as defined in the record level event codes for each record that follows

Table 179 — Response Level

VALUE	DESCRIPTION
NE	Never. No application-level response needed
ER	Error/Reject conditions only. Only MFA segments denoting errors must be returned via the application-level acknowledgment for this message
AL	Always. All MFA segments (whether denoting errors or not) must be returned via the application-level acknowledgment message
SU	Success. Only MFA segments denoting success must be returned via the application-level acknowledgment for this message

Table 180 — Record Level Event Code

VALUE	DESCRIPTION
MAD	Add record to master file
MDL	Delete record from master file
MUP	Update record for master file
MDC	Deactivate: discontinue using record in master file, but do not delete from database
MAC	Reactivate deactivated record

VA Specific Tables

Table VA01 — Yes/No

VALUE	DESCRIPTION
0	NO
1	YES

Table VA02 — Current Means Test Status
Type of Care (#.03) field of Means Test Status (#408.32) file

VALUE	DESCRIPTION
D	DISCRETIONARY
M	MANDATORY
N	NOT APPLICABLE

Table VA04 — Eligibility
Name (#.01) field of MAS Eligibility Code (#8.1) file

VALUE	DESCRIPTION
1	SERVICE CONNECTED 50% to 100%
2	AID & ATTENDANCE
3	SC LESS THAN 50%
4	NSC - VA PENSION
5	NSC
6	OTHER FEDERAL AGENCY
7	ALLIED VETERAN
8	HUMANITARIAN EMERGENCY
9	SHARING AGREEMENT
10	REIMBURSABLE INSURANCE
12	CHAMPVA
13	COLLATERAL OF VET.
14	EMPLOYEE
15	HOUSEBOUND
16	MEXICAN BORDER WAR
17	WORLD WAR I
18	PRISONER OF WAR

Table VA05 — Disability Retirement From Military
Disability Ret. From Military? (#.362) field of Patient (#2) file

VALUE	DESCRIPTION
0	NO
1	YES, RECEIVING MILITARY RETIREMENT
2	YES, RECEIVING MILITARY RETIREMENT IN LIEU OF VA COMPENSATION
3	UNKNOWN

Table VA06 — Eligibility Status
Eligibility Status (#.3611) field of Patient (#2) file

VALUE	DESCRIPTION
P	PENDING VERIFICATION
R	PENDING RE-VERIFICATION
V	VERIFIED

Table VA07 — Race
Abbreviation (#2) field of Race (#10) file

VALUE	DESCRIPTION
1	HISPANIC, WHITE
2	HISPANIC, BLACK
3	AMERICAN INDIAN OR ALASKA NATIVE
4	BLACK, NOT OF HISPANIC ORIGIN
5	ASIAN OR PACIFIC ISLANDER
6	WHITE, NOT OF HISPANIC ORIGIN
7	UNKNOWN

TableVA08 — Religion (user defined)
 This table contains VA Religion codes.
 Code (#3) field of Religion (#13) file.

VALUE	DESCRIPTION
0	CATHOLIC
1	JEWISH
2	EASTERN ORTHODOX
3	BAPTIST
4	METHODIST
5	LUTHERAN
6	PRESBYTERIAN
7	UNITED CHURCH OF CHRIST
8	EPISCOPALIAN
9	ADVENTIST
10	ASSEMBLY OF GOD
11	BRETHREN
12	CHRISTIAN SCIENTIST
13	CHURCH OF CHRIST
14	CHURCH OF GOD
15	DISCIPLES OF CHRIST
16	EVANGELICAL COVENANT
17	FRIENDS
18	JEHOVAH'S WITNESS
19	LATTER-DAY SAINTS
20	ISLAM
21	NAZARENE
22	OTHER
23	PENTECOSTAL
24	PROTESTANT, OTHER
25	PROTESTANT, NO DENOMINATION
26	REFORMED
27	SALVATION ARMY
28	UNITARIAN; UNIVERSALIST
29	UNKNOWN/NO PREFERENCE
30	NATIVE AMERICAN
31	BUDDHIST

Table VA11 — Period of Service

VALUE	DESCRIPTION
0	KOREAN
1	WORLD WAR I
2	WORLD WAR II
3	SPANISH AMERICAN
4	PRE-KOREAN
5	POST-KOREAN
6	OPERATION DESERT SHIELD
7	VIETNAM ERA
8	POST-VIETNAM
9	OTHER OR NONE
A	ARMY--ACTIVE DUTY
B	NAVY, MARINE—ACTIVE DUTY
C	AIR FORCE—ACTIVE DUTY
D	COAST GUARD—ACTIVE DUTY
E	RETIRED, UNIFORMED FORCES
F	MEDICAL REMEDIAL ENLIST
G	MERCHANT SEAMEN—USPHS
H	OTHER USPHS BENEFICIARIES
I	OBSERVATION/EXAMINATION
J	OFFICE OF WORKERS COMP
K	JOB CORPS/PEACE CORPS
L	RAILROAD RETIREMENT
M	BENEFICIARIES-FOREIGN GOV
N	HUMANITARIAN (NON-VET)
O	CHAMPUS RESTORE
P	OTHER REIMBURS. (NON-VET)
Q	OTHER FEDERAL - DEPENDENT
R	DONORS (NON-VET)
S	SPECIAL STUDIES (NON-VET)
T	OTHER NON-VETERANS
U	CHAMPVA—SPOUSE, CHILD
V	CHAMPUS
W	CZECHOSLOVAKIA/POLAND SVC
X	PERSIAN GULF WAR
Y	CAV/NPS
Z	MERCHANT MARINE

Table VA12 — Type of Insurance

VALUE	DESCRIPTION
0	NO INSURANCE
1	MAJOR MEDICAL
2	DENTAL
3	HMO
4	PPO
5	MEDICARE
6	MEDICAID
7	CHAMPUS
8	WORKMANS COMP
9	INDEMNITY
10	PRESCRIPTION
11	MEDICARE SUPPLEMENTAL
12	ALL OTHER

Table VA13 — VTQ Query Name

NAME	FUNCTION
VTQ_PID_ICN_LOAD_1	Used to tell MPI that site is in initialization phase
VTQ_PID_ICN	Used to inquire to the MPI without any addition to MPI

Table VA14 — VTQ Selection Criteria

FIELD	HL7 FIELD NUMBER
Social Security Number	00122
Date of Birth	00110
Patient Name	00108.1 (sub field Last Name field number)
Optional fields included: (can be used to refine close matches)	
First Name	00108.2
Middle initial or name	00108.3
Name Suffix	00108.4
Name Prefix	00108.5
Birth Place City	00126.1
Birth Place State	00126.2 (City and State are defined as separate fields in the MPI and are separated here using the decimal sub-numbers 126.1 and 126.2.)
Mothers maiden (last) name	00109.1
Sex	00111
Date of death	00740
Patient primary Facility	00756
ICN	00105
Servicing Facility	00169

Table VA15 — Employment Status

VALUE	DESCRIPTION
1	EMPLOYED FULL TIME
2	EMPLOYED PART TIME
3	NOT EMPLOYED
4	SELF EMPLOYED
5	RETIRED
6	ACTIVE MILITARY DUTY
7	UNKNOWN